

## PATENT ABSTRACTS OF JAPAN

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### (54) WATER-SOLUBLE FILM

#### (57)Abstract:

**PROBLEM TO BE SOLVED:** To prepare a water-soluble film which is excellent in low-temp. solubility, does not exhibit any changes in physical properties with changes in temp. and humidity, and does not undergo the degradation in quality even when kept in contact with chemicals such as an alkali by compounding a specific modified PVA resin and a specific PVA resin.

**SOLUTION:** This compsn. comprises a modified PVA resin having anionic groups (pref. carboxyl and/or sulfo groups) pref. in an amt. of 2.0-40mol% (in terms of degree of modification) and a degree of polymn. of pref. 200-8,000 and a PVA resin having a degree of saponification of 70-99mol% and a degree of polymn. of pref. 200-8,000. The modified PVA resin having carboxyl groups is produced by subjecting PVA to the Michael addition reaction with acrylonitrile or acrylamide and partly or fully hydrolyzing the reaction product, and the one having sulfo groups is produced by subjecting PVA to the Michael addition reaction with vinylsulfonic acid, etc. The wt. ratio of the modified PVA resin to the PVA resin is pref. (95:5)-(5:95).